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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,516	01/23/2004	Jeremy Bunn	200309382-1	7215
22879 7590 05/01/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER WILLIAMS, KENT L	
			ART UNIT	PAPER NUMBER
			2139	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,516

Applicant(s)

BUNN ET AL.

Examiner

Kent L. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>23 January 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is merely a recitation of claim 27. Correction is required. See MPEP § 608.01(b).

Drawings

2. Figures 5-8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 35 is objected to because of the following informalities: inappropriately reciting "means for means for." Appropriate correction is required.
4. Applicant is advised that should claims 2 and 8 be found allowable, claims 2 and 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both

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cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Where the sixth paragraph of 35 U.S.C. 112 has been invoked regarding "means for" functional modifier, the specification must contain at least a *definite structure* corresponding to the function of the claim. The Examiner can not ascertain the structure(s) corresponding to the means for posting a print job to a rendezvous point (outside of a firewall), means for detecting the presence of a print job at a rendezvous point, means for initiating secure transmissions between a device and the rendezvous point through a firewall, or means for polling a selected rendezvous point.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 25-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, Claims 25-31 are directed to "a program" stored in a "computer-readable medium" and an already "suitably programmed information-handling system." Generally, functional descriptive material, such as a computer program, is statutory when it is stored on a tangible computer readable medium with the intention to cause a process to perform a specific method. See MPEP § 2106 IV.B.I(a). However, in the present application, the specification defines "computer readable medium" to include, for example, paper or various transmission media such as "carrier waves" per page 3, lines 20, and "wireless communications" per page 12, line 16 of the specification. A computer program listing on a sheet of paper is not considered to provide functionality, and is therefore considered to be merely a computer program per se, which is non-statutory subject matter. Further, "transmission media" such as "communications links" as broadly defined may include non-tangible media such as signals or carrier waves, which are also considered non-statutory. When a claim encompasses both statutory and non-statutory subject matter, the claim as a whole is directed to non-statutory subject matter. Regarding the language separation within the specification of the instant application, the Examiner wishes to point out that "media" is defined for both "storage media" and "communications/transmission media." The second paragraph of the Detailed Description section might be separated to indicate "computer readable **storage** media" for CD-ROMs, Hard Disk Drives and other tangible storage media, and indicate

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"computer readable *transmission* media" for carrier waves and other communication means.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-6 and 8-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Keeney et al. (U.S. Patent No. 7,093,046 B2).

C1. A method of printing a print job from a device outside a firewall at an imaging device behind a firewall comprising:

sending a print job to a print job rendezvous point outside the firewall [Column 6, lines 55-67.];

polling the print job rendezvous point using a polling device within the firewall [Column 7, lines 5-12.];

downloading the print job from the print job rendezvous point [Column 7, lines 1-5.];

routing the print job to an imaging device within the firewall [Column 7, lines 1-5.]; and

creating an image at the imaging device from the print job [Column 3 & 4, lines 1-67 & 1-67, summarizing the entire invention where "rendezvous" is called "spooling" within

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the reference.].

C2. The method of claim 1 wherein the print job rendezvous point is identified by universal resource location (URL) [Column 11, lines 1-45. DHCP is a well-known protocol utilizing and accommodating for other servers and/or resources utilizing varying protocols *including* URL, HTTP, HTTPS and SSL. Please see Drach, S., "DHCP Option for The Open Group's User Authentication Protocol," January 1999. Please also see MPEP §2131.01. The secondary reference shows that U.S. Patent No. 7,093,046 an enabling disclosure that teaches the use of URL, HTTP, and SSL by reciting the use of DHCP. Please note the third paragraph of the introduction for an overview of the RFC (Request For Comment).].

C3. The method of claim 1 further comprising encrypting the print job [Column 8, lines 28-41.].

C4. The method of claim 1 further comprising:

encrypting the print job; and

decrypting the print job before creating the image at the imaging device [Column 8, lines 50-63.].

C5. The method of claim 1 wherein the sending the print job to the job rendezvous point and downloading the print job from the print job rendezvous point uses a secure protocol [Column 7, lines 1-5.].

C6. The method of claim 5 wherein the secure protocol is a secure sockets layer (SSL) protocol [Rejected per claim 2.].

C8. The method of claim 1 wherein sending a print job to a print job rendezvous

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point includes the step of posting the print job to a network service addressed by a universal resource location [Rejected per claim 2.].

C9. The method of claim 1 wherein an imaging device attached to a network behind a firewall polls the rendezvous point [Column 7, lines 18-39.].

C10. A system for handling a print job comprising:

a network further comprising:

an imaging device attached to the network; and

another device attached to the network;

a firewall positioned with respect to the network to reduce the risk of undesirable access to the network from locations outside the network;

a rendezvous point positioned outside to the firewall, wherein one of the imaging device or another device polls the rendezvous point to determine if a print job is located at the rendezvous point [Figure 1. "Rendezvous Point" is referenced as "Spooling Server."].

C11. The system of claim 10 further comprising an apparatus for transmitting the print job from the rendezvous point into the network and providing the print job to the imaging apparatus on the network [Figure 1, block 100.].

C12. The system of claim 10 wherein the imaging apparatus includes an embedded web server [Column 5, lines 22-37 *in conjunction with* Column 3, lines 61-65. Teaching the "polling device" having an embedded web server by "(e.g., via a user interface)," and teaching "integrated into...a printer," even as separate embodiments, still teaches the printing apparatus capable of a web interface/server.].

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C13. The system of claim 10 wherein the rendezvous point is specified by a universal resource location (URL) [Rejected per claim 2.].

C14. The system of claim 11 wherein the apparatus for transmitting the print job from the rendezvous point into the network uses a secure protocol [Rejected per claim 5.].

C15. The system of claim 14 wherein the secure protocol is secure hypertext transfer protocol (HTTPS) [Rejected per claim 2.].

C16. The system of claim 14 wherein the secure protocol is secure socket layer (SSL) protocol [Rejected per claim 2.].

C17. The system of claim 10 wherein the one of the imaging device or another device polls the rendezvous point periodically [Column 12, lines 1-4.].

C18. An imaging apparatus comprising:

a processor;

a storage device; and

software operable on the processor to:

poll a rendezvous point;

detect the presence of a print job at the rendezvous point; and

initiate transmission of the print job from the rendezvous point to the imaging apparatus; and

form an image from the information in the print job [Rejected per claim 1 and Column 14, lines 45-50.].

C19. The imaging apparatus of claim 18 wherein the software is further operable on the processor to decrypt the image of a copy of an original document using a public key of a

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person sending the document; and

print a copy of the image original document at the system of the recipient [Figure 5].

C20. The imaging apparatus of claim 18 wherein the storage device stores an image of the original document until an indication that the transmitted document is received

[Rejected per claim 2 and Figure 6. It is truly inherent that TCP/IP will contain acknowledgements to insure quality of service (e.g., a complete and correct transmission).].

C21. The imaging apparatus of claim 18 wherein the software is further operable on the processor to poll an other imaging apparatus to which the image of the original document is transmitted to determine if the other imaging device is enabled to receive the transmission of the original document [Column 11, lines 47-52.].

C22. A system for handling a print job comprising:

a first network further comprising:

an imaging device attached to the first network; and

another device attached to the first network;

a second network, the first network coupled to the second network;

a firewall positioned between the first network and the second network, the firewall for reducing the risk of undesirable access to the first network via the second network;

a rendezvous point positioned outside to the firewall, wherein one of the imaging device or another device polls the rendezvous point to determine if a print job is located at the rendezvous point [Figure 1.].

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C23. The system of claim 22 the print job is placed at the rendezvous point using a secure protocol [Rejected per claim 5.].

C24. The system of claim 22 further comprising:

a first secure channel between the first network and the rendezvous point; and

a second secure channel between the second network and the rendezvous point

[Figure 1 and Column 8, lines 28-41. It clearly illustrates two secured communication channels (by encryption) with ends at a "rendezvous" server (block 50).].

C25. A computer-readable medium having a program available thereon for causing a suitably programmed information-handling system to transport files between a rendezvous point and an imaging device protected by a firewall by performing the following when the program is executed on the information-handling system:

check the rendezvous point;

detect the presence of a file at the rendezvous point; and

initiate a secure transmission of the file from the rendezvous point to a device within the firewall [Column 8, lines 28-65.].

C26. The computer-readable medium of claim 25 wherein the file is a print job and wherein the device is an imaging apparatus, the program further capable of routing the print job to the imaging apparatus; and

forming an image from the information in the print job [Column 7, lines 1-25.].

C27. A computer-readable medium having a program available thereon for causing a suitably programmed information-handling system to perform the following when the program is executed on the information-handling system:

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detects the presence of a print job; and

posts the print job at a selected rendezvous point [Column 6, lines 43-67.].

C28. The computer-readable medium of claim 27 wherein the program further causes a suitably programmed information-handling system to initiate a secure transmission of the print job to the selected rendezvous point from a device within a firewall when the program is executed on the information-handling system [Rejected per claim 25.].

C29. A computer-readable medium having a program available thereon for causing a suitably programmed information-handling system to perform the following when the program is executed on the information-handling system:

poll a rendezvous point; and

detect the presence of a print job at the rendezvous point [Rejected per claim 25.].

C30. The computer-readable medium of claim 29 wherein the program further causes a suitably programmed information-handling system to initiate a secure transmission of the print job from the rendezvous point to a device within a firewall when the program is executed on the information-handling system [Rejected per claim 25.].

C31. The computer-readable medium of claim 30 wherein the program further causes a suitably programmed information-handling system to:

route the print job to an imaging apparatus; and

form an image from the information in the print job, when the program is executed on the information-handling system [Rejected per claim 25.].

C32. A system for handling a print job comprising:

means for posting the print job at a selected rendezvous point; and

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means for detecting the presence of a print job at the rendezvous point [Rejected per claim 25.].

C33. The system for handling a print job of claim 32 wherein means for posting the print job at a selected rendezvous point posts the print job outside a firewall [Rejected per claim 25.].

C34. The system for handling a print job of claim 32 further comprising means for initiating a secure transmission of the print job to the selected rendezvous point from a device within a firewall [Rejected per claim 25.].

C35. The system for handling a print job of claim 32 further comprising means for means for polling a selected rendezvous point [Rejected per claim 25.].

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keeney et al. (U.S. Patent No. 7,093,046 B2).

Keeney et al. teach the systems and methods for printing over the internet using a "rendezvous" server to receive print jobs, which is in-turn polled by a printing device to retrieve available print jobs for printing in order to avoid reconfiguring already-present firewalls. Keeney et al. explicitly teach the use of several common protocols with their secured-internet printing invention, including DHCP, HTTP, HTTPS, etc. with the use of URLs (Uniform Resource Locators) and the SSL (Secured Sockets Layer). However, Keeney et al. fail to explicitly mention the use of FTP (File Transfer Protocol) due to its inordinate predisposition to small file numbers inherent in such an Internet-printing invention.

Despite, it would have been obvious to one of ordinary skill in the art to consider and/or use FTP with the invention of Keeney et al. because the invention of Keeney et al. "routes the output of the print job to the spooling server **50** located outside of the firewall **30** *using packets and ports that resemble web traffic*. (Emphasis added, Column 7, Lines 32-34)." Teaching the general use of "packets and ports that resemble web traffic," in essence, teaches the use of all well-established and common Internet protocols (non-exhaustive): HTTP, FTP, SMTP, SNMP, IRC, and etcetera. Also, Keeney et al. state, "The printer polling device may be connected to the network using DHCP protocol, or any other suitable network configuration protocol. (Column 4, Lines 65-67)."

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Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Qiao (U.S. Patent Application Publication No. 2003/0030843 A1) teaches varying ideas for Internet Printing services.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kent L. Williams whose telephone number is 571-270-1376. The examiner can normally be reached on Mon-Fri 7:00-4:30 with Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Williams
4/24/2007

CHRISTOPHER REVAK
PRIMARY EXAMINER

